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TITLE : METHOD FOR EVALUATING

OPTIMUM INJECTION MOLDING CONDITION UTILIZING FLOW ANALYSIS AND INJECTION

MOLDING APPARATUS

ABSTRACT

: PURPOSE: To provide a molding apparatus constituted so as to be capable of determining the optimum molding condition by a simple method.

CONSTITUTION: In order to perform the flow analysis of the molten material in a mold, a product shape model is divided into fine elements (S1) and a standard temporary temp. condition is set (S2) and (n) filling times are set (S3, S5). Then, flow analysis is performed to calculate the max. values of shearing stress changing timewise in the respective fine elements (S4). As a result, graphs showing the relations between filling times and the max. values of shearing stress are calculated with respect to (m) fine elements (S6) and, with respect to (m) kinds of the graphs, the filling time wherein the difference between the max. values of shearing stress of the respective graphs is calculated

to be determined as the optimum filling time (S7) and, thereafter, the evaluation of other molding conditions is

performed.